APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,064	09/28/2001	Robert E. Van Cleve	1662-41100 JMH (P01-3617)	4192

22879	7590	05/17/2005

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EXAMINER
DU, THUAN N

ART UNIT	PAPER NUMBER
2116	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 March 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>2-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>2-5 and 13-15</u> is/are allowed.

6)☒ Claim(s) <u>6-12 and 16-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   It is hereby acknowledged that the following papers have been received and placed of

record in the file: Amendment (dated 3/7/05).

2.   Claim 1 has been cancelled. Claims 2-22 are presented for examination.

3.   The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

Claim Rejections - 35 USC § 103

4.   Claims 6-9 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over

applicant's admission of prior art [AAPA] and Alcorn et al. [Alcorn] (U.S. Patent No.

6,106,396).

5.   Regarding claim 6, AAPA teaches a computer system comprising:

a CPU;

a main memory coupled to the CPU;

a read only memory (ROM) coupled to the CPU, where the ROM stored BIOS programs

[a typical computer system includes CPU, main memory and BIOS ROM];

wherein at least one operating system driver of the operating system drivers is read from

a storage device during installation of an operating system for the computer [application's

specification, page 2, lines 16-22].

AAPA does not teach that operation system drivers are stored together with BIOS

programs in the ROM.

Alcorn teaches that a computer system comprising:

a CPU [microprocessor 12];

a main memory coupled to the CPU [main memory 13];

a read only memory (ROM) coupled to the CPU [system boot ROM 14], where the ROM

stored BIOS programs [col. 6, lines 24-26; col. 7, line 26], and further where the ROM stores

operation system drivers [col. 6, lines 26-28; col. 7, lines 29-30], wherein the ROM further

comprising:

a redundant portion [Figs. 1 and 2, portion 29 of ROM 14], wherein the redundant portion

of the ROM stores the BIOS programs [col. 7, line 26];

a non-redundant portion [Figs. 1 and 2, portion 30 of ROM 14], wherein the non-

redundant portion of the ROM stores the operation system drivers [col. 7, lines 29-30].

Alcorn does not explicitly teach that the ROM contains a second set of BIOS programs.

However, it is well known to those skill in the art that in order to increase the integrity of

the system, a backup BIOS is provided. Furthermore, one of ordinary skill in the art would have

recognized that it would have been obvious to stores the backup BIOS in the same ROM of the

primary BIOS for easy retrieval in case the primary BIOS fails.

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify the teachings of AAPA to divide the ROM into two portions for storing BIOS in one

portion and operation system drivers in the other as taught by Alcorn [Fig. 2; col. 7, lines 17-20].

The modification would not only increase the flexibility of the system by providing another way

for storing operation system drivers but also increase the convenience for the user upon installing

the operation system.

6.   Regarding claim 7, it would have been obvious to one of ordinary skill in the art to

recognized that the backup BIOS is substantially identical with the primary BIOS.

7.   Regarding claim 8, Alcorn teaches that the ROM could be any type of programmable

ROM [col. 7, lines 22-25].

8.   Regarding claim 9, Alcorn teaches that the ROM could be any type of programmable

ROM [col. 7, lines 22-25].

        Alcorn does not explicitly teach that the ROM contains a second set of BIOS programs.

        However, it is well known to those skill in the art that in order to increase the integrity of

the system, a backup BIOS is provided. Furthermore, one of ordinary skill in the art would have

recognized that it would have been obvious to stores the backup BIOS in the same ROM of the

primary BIOS for easy retrieval in case the primary BIOS fails.

9.   Regarding claims 21 and 22, they do not teach or further define over the limitations

recited in claims 6-9 above. Therefore, claims 21 and 22 are also rejected for the same reasons

set forth in claims 6-9.

10.   Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alcorn et

al. [Alcorn] (U.S. Patent No. 6,106,396) and Nakagiri (U.S. Patent No. 6,606,669).

11.   Regarding claim 10, Alcorn teaches a method comprising:

        storing in a ROM device of a computer a basic input output system (BIOS) program [col.

6, lines 24-26; col. 7, line 26]; and

        storing in the ROM hardware drivers for an operating system [col. 6, lines 26-28; col. 7,

lines 29-30].

Alcorn does not explicitly teach that the hardware drivers stored in the ROM could be used for a plurality of different operating systems.

Nakagiri teaches that hardware drivers stored in a ROM (13) could be used for a plurality of different operating systems [col. 5, lines 16-26].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Alcorn to store in the ROM hardware drivers which could be used for a plurality of different operating systems as taught by Nakagiri. The modification would reduce the time of the operating system installation.

12.   Regarding claims 11 and 12, Alcorn teaches the method further comprising:

dividing the ROM into a redundant (portion 29) and non-redundant (portion 30) portions [Figs. 1 and 2];

storing the BIOS program in the redundant portion of the ROM [col. 7, line 26];

storing the hardware drivers in the non-redundant portion of the ROM [col. 7, lines 29-30].

Alcorn does not explicitly teach that the ROM contains a second set of BIOS programs.

However, it is well known to those skill in the art that in order to increase the integrity of the system, a backup BIOS is provided. Furthermore, one of ordinary skill in the art would have recognized that it would have been obvious to stores the backup BIOS in the same ROM of the primary BIOS for easy retrieval in case the primary BIOS fails.

13.   Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admission of prior art [AAPA], Alcorn et al. [Alcorn] (U.S. Patent No. 6,106,396) and Nakagiri (U.S. Patent No. 6,606,669).

14.   Regarding claim 16, AAPA teaches a method comprising the step of supplying an

operating system driver during the installation of an operating system by copying the operation

system driver from a storage device [application's specification, page 2, lines 16-22].

AAPA does not teach that operation system driver is stored together with BIOS programs

in a ROM.

Alcorn teaches that a computer system comprising:

a CPU [microprocessor 12];

a main memory coupled to the CPU [main memory 13];

a read only memory (ROM) coupled to the CPU [system boot ROM 14], where the ROM

stored BIOS programs [col. 6, lines 24-26; col. 7, line 26], and further where the ROM stores

operation system drivers [col. 6, lines 26-28; col. 7, lines 29-30].

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify the teachings of AAPA to divide the ROM into two portions for storing BIOS in one

portion and operation system drivers in the other as taught by Alcorn [Fig. 2; col. 7, lines 17-20].

The modification would not only increase the flexibility of the system by providing another way

for storing operation system drivers but also increase the convenience for the user upon installing

the operation system.

Both AAPA and Alcorn does not explicitly teach that the hardware drivers stored in the

ROM could be used for a plurality of different operating systems.

Nakagiri teaches that hardware drivers stored in a ROM (13) could be used for a plurality

of different operating systems [col. 5, lines 16-26].

It would have been obvious to one of ordinary skill in the art at the time of the invention
to modify the teachings of AAPA-Alcorn to store in the ROM hardware drivers which could be
used for a plurality of different operating systems as taught by Nakagiri. The modification
would reduce the time of the operating system installation.

15.   Regarding claim 17, Alcorn teaches that the ROM could be any type of programmable
ROM [col. 7, lines 22-25].

16.   Regarding claim 18, AAPA teaches a computer system comprising:

        a microprocessor;

        a main memory coupled to the microprocessor;

        a read only memory (ROM) coupled to the microprocessor, where the ROM stored BIOS
programs [a typical computer system includes CPU, main memory and BIOS ROM];

        wherein at least one operating system driver of the operating system drivers is read from
a storage device during installation of an operating system for the computer [application's
specification, page 2, lines 16-22].

        AAPA does not teach that operation system drivers are stored together with BIOS
programs in the ROM.

        Alcorn teaches that a computer system comprising:

        a microprocessor [12];

        a main memory coupled to the microprocessor [main memory 13];

        a read only memory (ROM) coupled to the microprocessor [system boot ROM 14], where
the ROM stored BIOS programs [col. 6, lines 24-26; col. 7, line 26], and further where the ROM

stores operation system drivers [col. 6, lines 26-28; col. 7, lines 29-30], wherein the ROM further

comprising:

a redundant portion [Figs. 1 and 2, portion 29 of ROM 14], wherein the redundant portion

of the ROM stores the BIOS programs [col. 7, line 26];

a non-redundant portion [Figs. 1 and 2, portion 30 of ROM 14], wherein the non-

redundant portion of the ROM stores the operation system drivers [col. 7, lines 29-30].

Alcorn does not explicitly teach that the ROM contains a second set of BIOS programs.

However, it is well known to those skill in the art that in order to increase the integrity of

the system, a backup BIOS is provided. Furthermore, one of ordinary skill in the art would have

recognized that it would have been obvious to stores the backup BIOS in the same ROM of the

primary BIOS for easy retrieval in case the primary BIOS fails.

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify the teachings of AAPA to divide the ROM into two portions for storing BIOS in one

portion and operation system drivers in the other as taught by Alcorn [Fig. 2; col. 7, lines 17-20].

The modification would not only increase the flexibility of the system by providing another way

for storing operation system drivers but also increase the convenience for the user upon installing

the operation system.

Both AAPA and Alcorn does not explicitly teach that the hardware drivers stored in the

ROM could be used for a plurality of different operating systems.

Nakagiri teaches that hardware drivers stored in a ROM (13) could be used for a plurality

of different operating systems [col. 5, lines 16-26].

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify the teachings of AAPA-Alcorn to store in the ROM hardware drivers which could be

used for a plurality of different operating systems as taught by Nakagiri. The modification

would reduce the time of the operating system installation

17.   Regarding claim 19, it would have been obvious to one of ordinary skill in the art to

recognized that the backup BIOS and the primary BIOS programs are substantially the same.

18.   Regarding claim 20, Alcorn teaches that the ROM could be any type of programmable

ROM [col. 7, lines 22-25].

Allowable Subject Matter

19.   Claims 2-5 and 13-15 are allowed.

Conclusion

20.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

21.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thuan N. Du whose telephone number is (571) 272-3673. The

examiner can normally be reached on Monday and Wednesday-Friday: 9:30 AM - 8:00 PM,

EST.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lynne H. Browne can be reached on (571) 272-3670.

        Central TC telephone number is (571) 272-2100.

        The fax number for the organization is (703) 872-9306.

22.   Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Thuan N. Du
May 13, 2005